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Conservation
Service

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Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Hampshire County, Massachusetts, Central Part



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

























Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



MAP LEGEND

	Area of Interest (AOI)		Spill Area	
	Area of Interest (AOI)		Stony Spot	
	Soils		Very Stony Spot	
	Soil Map Unit Polygons		Wet Spot	
	Soil Map Unit Lines		Other	
	Soil Map Unit Points		Special Line Features	
Special Point Features				
	Blowout	Water Features		
	Borrow Pit	Streams and Canals		
	Clay Spot	Transportation		
	Closed Depression		+++	Rails
	Gravel Pit		Interstate Highways	
	Gravelly Spot		US Routes	
	Landfill		Major Roads	
	Lava Flow		Local Roads	
	Marsh or swamp	Background		
	Mine or Quarry		Aerial Photography	
	Miscellaneous Water			
	Perennial Water			
	Rock Outcrop			
	Saline Spot			
	Sandy Spot			
	Severely Eroded Spot			
	Sinkhole			
	Slide or Slip			
	Sodic Spot			

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hampshire County, Massachusetts, Central Part
Survey Area Data: Version 8, Dec 17, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2011—May 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Hampshire County, Massachusetts, Central Part (MA609)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Water	4.1	0.3%
2A	Pootaluck fine sandy loam, 0 to 3 percent slopes	46.5	3.0%
14A	Scitico silt loam, 0 to 3 percent slopes	2.6	0.2%
30A	Raynham silt loam, 0 to 3 percent slopes	6.8	0.4%
31A	Walpole fine sandy loam, 0 to 3 percent slopes	39.1	2.5%
39A	Scarboro muck, 0 to 1 percent slopes	70.6	4.5%
70A	Ridgebury fine sandy loam, 0 to 3 percent slopes	8.4	0.5%
70B	Ridgebury fine sandy loam, 3 to 8 percent slopes	0.0	0.0%
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	12.4	0.8%
88A	Ridgebury fine sandy loam, 0 to 3 percent slopes, very stony	18.9	1.2%
88B	Ridgebury fine sandy loam, 3 to 8 percent slopes, very stony	13.2	0.8%
220B	Boxford silt loam, 3 to 8 percent slopes	1.0	0.1%
225B	Belgrade silt loam, 3 to 8 percent slopes	8.2	0.5%
253A	Hinckley loamy sand, 0 to 3 percent slopes	76.2	4.8%
253B	Hinckley loamy sand, 3 to 8 percent slopes	159.6	10.1%
253C	Hinckley loamy sand, 8 to 15 percent slopes	39.1	2.5%
253D	Hinckley loamy sand, 15 to 25 percent slopes	49.6	3.2%
253E	Hinckley loamy sand, 25 to 35 percent slopes	12.1	0.8%
254A	Merrimac fine sandy loam, 0 to 3 percent slopes	37.7	2.4%
254B	Merrimac fine sandy loam, 3 to 8 percent slopes	92.6	5.9%
254C	Merrimac fine sandy loam, 8 to 15 percent slopes	11.1	0.7%
260A	Sudbury fine sandy loam, 0 to 3 percent slopes	31.9	2.0%

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Hampshire County, Massachusetts, Central Part (MA609)			
Map Unit Symbol	Map Unit Name	Acres In AOI	Percent of AOI
260B	Sudbury fine sandy loam, 3 to 8 percent slopes	10.8	0.7%
300B	Montauk fine sandy loam, 3 to 8 percent slopes	31.8	2.0%
300C	Montauk fine sandy loam, 8 to 15 percent slopes	3.8	0.2%
301B	Montauk fine sandy loam, 3 to 8 percent slopes, very stony	11.9	0.8%
306E	Paxton fine sandy loam, steep, very stony	2.0	0.1%
315B	Scituate fine sandy loam, 3 to 8 percent slopes	5.1	0.3%
316B	Scituate fine sandy loam, 3 to 8 percent slopes, very stony	13.3	0.8%
440B	Gloucester fine sandy loam, 3 to 8 percent slopes	34.4	2.2%
440C	Gloucester fine sandy loam, 8 to 15 percent slopes	36.0	2.3%
441B	Gloucester fine sandy loam, 3 to 8 percent slopes, very stony	100.6	6.4%
441C	Gloucester fine sandy loam, 8 to 15 percent slopes, very stony	107.2	6.8%
441D	Gloucester fine sandy loam, 15 to 25 percent slopes, very stony	72.8	4.6%
533C	Montauk fine sandy loam, 3 to 15 percent slopes, stony	21.1	1.3%
534B	Gloucester fine sandy loam, 3 to 8 percent slopes, stony	167.2	10.6%
534C	Gloucester fine sandy loam, 8 to 15 percent slopes, stony	88.1	5.6%
537B	Paxton fine sandy loam, 3 to 8 percent slopes, stony	6.4	0.4%
537C	Paxton fine sandy loam, 8 to 15 percent slopes, stony	24.9	1.6%
537D	Paxton fine sandy loam, 15 to 25 percent slopes, stony	1.0	0.1%
600	Pits, gravel	17.6	1.1%
711C	Charlton-Rock outcrop-Hollis complex, sloping	1.0	0.1%
711E	Charlton-Rock outcrop-Hollis complex, steep	30.1	1.9%
727A	Enosburg fine sandy loam, 0 to 3 percent slopes	3.3	0.2%
743E	Charlton and Gloucester fine sandy loams, 25 to 35 percent slopes, very stony	40.3	2.6%

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Hampshire County, Massachusetts, Central Part (MA609)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
745C	Hinckley-Merrimac-Urban land complex, 3 to 15 percent slopes	2.1	0.1%
Totals for Area of Interest		1,574.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Hampshire County, Massachusetts, Central Part

1—Water

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 120 to 200 days

Map Unit Composition

Water: 100 percent

2A—Pootatuck fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Pootatuck and similar soils: 85 percent

Minor components: 15 percent

Description of Pootatuck

Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy alluvium over sandy and gravelly alluvium derived from granite and gneiss

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 in/hr)

Depth to water table: About 20 to 34 inches

Frequency of flooding: Frequent

Frequency of ponding: None

Available water capacity: Moderate (about 6.5 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2w

Hydrologic Soil Group: B

Typical profile

0 to 10 inches: Fine sandy loam

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10 to 34 inches: Fine sandy loam

34 to 60 inches: Stratified sand to loamy fine sand

Minor Components

Rippowam

Percent of map unit: 15 percent

Landform: Alluvial flats

14A—Scitico silt loam, 0 to 3 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Scitico and similar soils: 85 percent

Minor components: 15 percent

Description of Scitico

Setting

Landform: Depressions

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Hard silty glaciolacustrine deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 8.6 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 4w

Hydrologic Soil Group: C

Typical profile

0 to 10 inches: Silt loam

10 to 22 inches: Silt loam

22 to 36 inches: Silty clay

36 to 65 inches: Silty clay

Minor Components

Boxford

Percent of map unit: 5 percent

Maybid

Percent of map unit: 5 percent

Landform: Depressions

Raynham

Percent of map unit: 5 percent

Landform: Depressions

30A—Raynham silt loam, 0 to 3 percent slopes

Map Unit Setting

Elevation: 50 to 500 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Raynham and similar soils: 85 percent

Minor components: 15 percent

Description of Raynham

Setting

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Silty glaciolacustrine deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 31 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Available water capacity: High (about 11.8 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 3w

Hydrologic Soil Group: C

Typical profile

0 to 10 inches: Silt loam

10 to 37 inches: Silt loam

37 to 60 inches: Stratified loamy fine sand to fine sandy loam to silt loam

Minor Components

Belgrade

Percent of map unit: 5 percent

Maybid

Percent of map unit: 5 percent

Landform: Depressions

Scitico

Percent of map unit: 5 percent

Landform: Depressions

31A—Walpole fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Walpole and similar soils: 80 percent

Minor components: 20 percent

Description of Walpole

Setting

Landform: Terraces

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.8 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 3w

Hydrologic Soil Group: C

Typical profile

0 to 4 inches: Fine sandy loam
4 to 14 inches: Fine sandy loam
14 to 23 inches: Sandy loam
23 to 60 inches: Stratified very gravelly sand to loamy sand

Minor Components

Sudbury

Percent of map unit: 5 percent

Deerfield

Percent of map unit: 5 percent

Ninigret

Percent of map unit: 5 percent

Scarboro

Percent of map unit: 5 percent

Landform: Terraces

39A—Scarboro muck, 0 to 1 percent slopes

Map Unit Setting

Elevation: 0 to 2,100 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 240 days

Map Unit Composition

Scarboro and similar soils: 85 percent
Minor components: 15 percent

Description of Scarboro

Setting

Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loose sandy glaciofluvial deposits

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water capacity: Moderate (about 6.9 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 5w

Hydrologic Soil Group: D

Typical profile

0 to 8 inches: Muck

8 to 19 inches: Loamy sand

19 to 60 inches: Loamy sand

Minor Components

Walpole

Percent of map unit: 10 percent

Landform: Terraces

Swansea

Percent of map unit: 5 percent

Landform: Bogs

70A—Ridgebury fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Elevation: 50 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Ridgebury and similar soils: 85 percent

Minor components: 15 percent

Description of Ridgebury

Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Friable loamy eolian deposits over dense loamy lodgment till
derived from granite and gneiss

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately
high (0.00 to 0.20 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Custom Soil Resource Report

Frequency of ponding: None

Available water capacity: Very low (about 1.9 inches)

Typical profile

0 to 2 inches: Gravelly fine sandy loam

2 to 15 inches: Gravelly sandy loam

15 to 60 inches: Gravelly fine sandy loam

Minor Components

Scituate

Percent of map unit: 5 percent

Whitman

Percent of map unit: 5 percent

Landform: Depressions

Woodbridge

Percent of map unit: 5 percent

70B—Ridgebury fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Elevation: 50 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Ridgebury and similar soils: 85 percent

Minor components: 15 percent

Description of Ridgebury

Setting

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Friable loamy eolian deposits over dense loamy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.9 inches)

Typical profile

0 to 2 inches: Gravelly fine sandy loam
2 to 15 inches: Gravelly sandy loam
15 to 60 inches: Gravelly fine sandy loam

Minor Components

Scituate

Percent of map unit: 5 percent

Whitman

Percent of map unit: 5 percent
Landform: Depressions

Woodbridge

Percent of map unit: 5 percent

73A—Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony

Map Unit Setting

Elevation: 0 to 2,100 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 240 days

Map Unit Composition

Whitman and similar soils: 85 percent
Minor components: 15 percent

Description of Whitman

Setting

Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Friable loamy eolian deposits over dense loamy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 0 to 3 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 10 to 24 inches to densic material
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water capacity: Very low (about 2.1 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: D

Typical profile

0 to 7 inches: Fine sandy loam

7 to 13 inches: Gravelly sandy loam

13 to 60 inches: Gravelly fine sandy loam

Minor Components

Ridgebury

Percent of map unit: 15 percent

Landform: Depressions

88A—Ridgebury fine sandy loam, 0 to 3 percent slopes, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Ridgebury and similar soils: 85 percent

Minor components: 15 percent

Description of Ridgebury

Setting

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Friable loamy eolian deposits over dense loamy lodgment till
derived from granite and gneiss

Properties and qualities

Slope: 0 to 3 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately
high (0.00 to 0.20 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.9 inches)

Interpretive groups

Farmland classification: Not prime farmland

Custom Soil Resource Report

Land capability (nonirrigated): 7s

Hydrologic Soil Group: C

Typical profile

0 to 2 inches: Gravelly fine sandy loam

2 to 15 inches: Gravelly sandy loam

15 to 60 inches: Gravelly fine sandy loam

Minor Components

Scituate

Percent of map unit: 5 percent

Whitman

Percent of map unit: 5 percent

Landform: Depressions

Woodbridge

Percent of map unit: 5 percent

88B—Ridgebury fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Ridgebury and similar soils: 85 percent

Minor components: 15 percent

Description of Ridgebury

Setting

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Friable loamy eolian deposits over dense loamy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.9 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: C

Typical profile

0 to 2 inches: Gravelly fine sandy loam

2 to 15 inches: Gravelly sandy loam

15 to 60 inches: Gravelly fine sandy loam

Minor Components

Scituate

Percent of map unit: 5 percent

Whitman

Percent of map unit: 5 percent

Landform: Depressions

Woodbridge

Percent of map unit: 5 percent

220B—Boxford silt loam, 3 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Boxford and similar soils: 85 percent

Minor components: 15 percent

Description of Boxford

Setting

Landform: Terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Hard silty and clayey glaciolacustrine deposits derived from granite and gneiss

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 19 to 36 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.3 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 2w
Hydrologic Soil Group: C

Typical profile

0 to 8 inches: Silt loam
8 to 21 inches: Silt loam
21 to 37 inches: Silty clay
37 to 60 inches: Silty clay

Minor Components

Scitico

Percent of map unit: 15 percent
Landform: Depressions

225B—Belgrade silt loam, 3 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 240 days

Map Unit Composition

Belgrade and similar soils: 85 percent
Minor components: 15 percent

Description of Belgrade

Setting

Landform: Terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Coarse-silty glaciolacustrine deposits

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 2.00 in/hr)
Depth to water table: About 18 to 42 inches
Frequency of flooding: None
Frequency of ponding: None

Custom Soil Resource Report

Available water capacity: High (about 10.7 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2w

Hydrologic Soil Group: B

Typical profile

0 to 10 inches: Silt loam

10 to 51 inches: Very fine sandy loam

51 to 60 inches: Loamy very fine sand

Minor Components

Raynham

Percent of map unit: 15 percent

Landform: Depressions

253A—Hinckley loamy sand, 0 to 3 percent slopes

Map Unit Setting

Elevation: 0 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Hinckley and similar soils: 80 percent

Minor components: 20 percent

Description of Hinckley

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loose sandy and gravelly glaciofluvial deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 3s

Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Loamy sand

8 to 13 inches: Loamy sand

13 to 29 inches: Gravelly sand

29 to 60 inches: Error

Minor Components

Sudbury

Percent of map unit: 10 percent

Windsor

Percent of map unit: 10 percent

253B—Hinckley loamy sand, 3 to 8 percent slopes

Map Unit Setting

Elevation: 0 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Hinckley and similar soils: 80 percent

Minor components: 20 percent

Description of Hinckley

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loose sandy and gravelly glaciofluvial deposits

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 3s

Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Loamy sand

8 to 13 inches: Loamy sand

13 to 29 inches: Gravelly sand

29 to 60 inches: Error

Minor Components

Sudbury

Percent of map unit: 10 percent

Windsor

Percent of map unit: 10 percent

253C—Hinckley loamy sand, 8 to 15 percent slopes

Map Unit Setting

Elevation: 0 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Hinckley and similar soils: 80 percent

Minor components: 20 percent

Description of Hinckley

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loose sandy and gravelly glaciofluvial deposits

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 4s

Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Loamy sand

8 to 13 inches: Loamy sand

13 to 29 inches: Gravelly sand

29 to 60 inches: Error

Minor Components

Windsor

Percent of map unit: 15 percent

Sudbury

Percent of map unit: 5 percent

253D—Hinckley loamy sand, 15 to 25 percent slopes

Map Unit Setting

Elevation: 0 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Hinckley and similar soils: 80 percent

Minor components: 20 percent

Description of Hinckley

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loose sandy and gravelly glaciofluvial deposits

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 6s

Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Loamy sand

8 to 13 inches: Loamy sand

13 to 29 inches: Gravelly sand

29 to 60 inches: Error

Minor Components

Windsor

Percent of map unit: 10 percent

Merrimac

Percent of map unit: 10 percent

253E—Hinckley loamy sand, 25 to 35 percent slopes

Map Unit Setting

Elevation: 0 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Hinckley and similar soils: 80 percent

Minor components: 20 percent

Description of Hinckley

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Riser

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Loose sandy and gravelly glaciofluvial deposits

Properties and qualities

Slope: 25 to 35 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Loamy sand

8 to 13 inches: Loamy sand

13 to 29 inches: Gravelly sand

29 to 60 inches: Error

Minor Components

Merrimac

Percent of map unit: 10 percent

Windsor

Percent of map unit: 10 percent

254A—Merrimac fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Merrimac and similar soils: 85 percent

Minor components: 15 percent

Description of Merrimac

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over loose sandy glaciofluvial deposits derived from granite and gneiss

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 5.4 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2s

Hydrologic Soil Group: A

Typical profile

0 to 16 inches: Gravelly fine sandy loam

16 to 24 inches: Gravelly sandy loam

24 to 60 inches: Stratified sand to very gravelly sand

Minor Components

Agawam

Percent of map unit: 5 percent

Sudbury

Percent of map unit: 5 percent

Hinckley

Percent of map unit: 5 percent

254B—Merrimac fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Merrimac and similar soils: 85 percent

Minor components: 15 percent

Description of Merrimac

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over loose sandy glaciofluvial deposits derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Custom Soil Resource Report

Available water capacity: Low (about 5.4 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2s

Hydrologic Soil Group: A

Typical profile

0 to 16 inches: Gravelly fine sandy loam

16 to 24 inches: Gravelly sandy loam

24 to 60 inches: Stratified sand to very gravelly sand

Minor Components

Sudbury

Percent of map unit: 5 percent

Agawam

Percent of map unit: 5 percent

Hinckley

Percent of map unit: 5 percent

254C—Merrimac fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Merrimac and similar soils: 85 percent

Minor components: 15 percent

Description of Merrimac

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over loose sandy glaciofluvial deposits derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Custom Soil Resource Report

Frequency of ponding: None

Available water capacity: Low (about 5.4 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 3e

Hydrologic Soil Group: A

Typical profile

0 to 16 inches: Gravelly fine sandy loam

16 to 24 inches: Gravelly sandy loam

24 to 60 inches: Stratified sand to very gravelly sand

Minor Components

Agawam

Percent of map unit: 7 percent

Hinckley

Percent of map unit: 5 percent

Sudbury

Percent of map unit: 3 percent

260A—Sudbury fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Elevation: 0 to 2,100 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Sudbury and similar soils: 85 percent

Minor components: 15 percent

Description of Sudbury

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Friable loamy eolian deposits over loose sandy glaciofluvial deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Custom Soil Resource Report

Depth to water table: About 18 to 36 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.8 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2w

Hydrologic Soil Group: B

Typical profile

0 to 10 inches: Fine sandy loam

10 to 16 inches: Fine sandy loam

16 to 28 inches: Gravelly loamy sand

28 to 60 inches: Stratified gravelly sand to very gravelly loamy sand

Minor Components

Merrimac

Percent of map unit: 5 percent

Hinckley

Percent of map unit: 5 percent

Walpole

Percent of map unit: 5 percent

Landform: Terraces

260B—Sudbury fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Elevation: 0 to 2,100 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Sudbury and similar soils: 85 percent

Minor components: 15 percent

Description of Sudbury

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Friable loamy eolian deposits over loose sandy glaciofluvial deposits

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.8 inches)

Interpretive groups

Farmland classification: All areas are prime farmland
Land capability (nonirrigated): 2e
Hydrologic Soil Group: B

Typical profile

0 to 10 inches: Fine sandy loam
10 to 16 inches: Fine sandy loam
16 to 28 inches: Gravelly loamy sand
28 to 60 inches: Stratified gravelly sand to very gravelly loamy sand

Minor Components

Merrimac

Percent of map unit: 5 percent

Hinckley

Percent of map unit: 5 percent

Walpole

Percent of map unit: 5 percent
Landform: Terraces

300B—Montauk fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 240 days

Map Unit Composition

Montauk and similar soils: 85 percent
Minor components: 15 percent

Description of Montauk

Setting

Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex

Custom Soil Resource Report

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over dense sandy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 18 to 30 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 24 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.0 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2e

Hydrologic Soil Group: C

Typical profile

0 to 6 inches: Fine sandy loam

6 to 21 inches: Fine sandy loam

21 to 60 inches: Gravelly loamy sand

Minor Components

Paxton

Percent of map unit: 5 percent

Gloucester

Percent of map unit: 5 percent

Scituate

Percent of map unit: 5 percent

300C—Montauk fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Montauk and similar soils: 85 percent

Minor components: 15 percent

Description of Montauk

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Custom Soil Resource Report

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over dense sandy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 18 to 30 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 24 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.0 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 3e

Hydrologic Soil Group: C

Typical profile

0 to 6 inches: Fine sandy loam

6 to 21 inches: Fine sandy loam

21 to 60 inches: Gravelly loamy sand

Minor Components

Gloucester

Percent of map unit: 7 percent

Paxton

Percent of map unit: 5 percent

Scituate

Percent of map unit: 3 percent

301B—Montauk fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Setting

Elevation: 0 to 400 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Montauk and similar soils: 85 percent

Minor components: 15 percent

Description of Montauk

Setting

Landform: Hills

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over dense sandy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: 18 to 30 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 24 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.0 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: C

Typical profile

0 to 6 inches: Fine sandy loam

6 to 21 inches: Fine sandy loam

21 to 60 inches: Gravelly loamy sand

Minor Components

Gloucester

Percent of map unit: 5 percent

Paxton

Percent of map unit: 5 percent

Scituate

Percent of map unit: 5 percent

306E—Paxton fine sandy loam, steep, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Paxton and similar soils: 70 percent

Minor components: 30 percent

Description of Paxton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

*Parent material: Friable loamy eolian deposits over dense loamy lodgment till
derived from granite and gneiss*

Properties and qualities

Slope: 25 to 35 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: 20 to 37 inches to densic material

Drainage class: Well drained

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately
high (0.00 to 0.20 in/hr)*

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam

3 to 26 inches: Fine sandy loam

26 to 60 inches: Fine sandy loam

Minor Components

Charlton

Percent of map unit: 10 percent

Montauk

Percent of map unit: 10 percent

Woodbridge

Percent of map unit: 5 percent

Wethersfield

Percent of map unit: 5 percent

315B—Scituate fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Scituate and similar soils: 85 percent

Minor components: 15 percent

Description of Scituate

Setting

Landform: Hills

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Friable loamy eolian deposits over dense sandy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 18 to 30 inches to densic material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 19 to 35 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Farmland classification: All areas are prime farmland

Land capability (nonirrigated): 2w

Hydrologic Soil Group: C

Typical profile

0 to 4 inches: Gravelly fine sandy loam

4 to 21 inches: Gravelly sandy loam

21 to 60 inches: Gravelly loamy sand

Minor Components

Woodbridge

Percent of map unit: 5 percent

Ridgebury

Percent of map unit: 5 percent

Landform: Depressions

Montauk

Percent of map unit: 5 percent

316B—Scituate fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Scituate and similar soils: 85 percent

Minor components: 15 percent

Description of Scituate

Setting

Landform: Hills

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Friable loamy eolian deposits over dense sandy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: 18 to 30 inches to densic material

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 19 to 35 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 2.8 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: C

Typical profile

0 to 4 inches: Gravelly fine sandy loam

4 to 21 inches: Gravelly sandy loam

21 to 60 inches: Gravelly loamy sand

Minor Components

Ridgebury

Percent of map unit: 5 percent

Landform: Depressions

Woodbridge

Percent of map unit: 5 percent

Montauk

Percent of map unit: 5 percent

440B—Gloucester fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 2s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Montauk

Percent of map unit: 10 percent

Charlton

Percent of map unit: 5 percent

Scituate

Percent of map unit: 5 percent

440C—Gloucester fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 3e

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

Custom Soil Resource Report

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Montauk

Percent of map unit: 10 percent

Scituate

Percent of map unit: 5 percent

Charlton

Percent of map unit: 5 percent

441B—Gloucester fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Montauk

Percent of map unit: 10 percent

Charlton

Percent of map unit: 5 percent

Scituate

Percent of map unit: 5 percent

441C—Gloucester fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Montauk

Percent of map unit: 10 percent

Scituate

Percent of map unit: 5 percent

Charlton

Percent of map unit: 5 percent

441D—Gloucester fine sandy loam, 15 to 25 percent slopes, very stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 15 to 25 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam
5 to 14 inches: Gravelly sandy loam
14 to 60 inches: Very gravelly loamy sand

Minor Components

Charlton

Percent of map unit: 10 percent

Montauk

Percent of map unit: 10 percent

533C—Montauk fine sandy loam, 3 to 15 percent slopes, stony

Map Unit Setting

Elevation: 0 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 140 to 240 days

Map Unit Composition

Montauk and similar soils: 85 percent
Minor components: 15 percent

Description of Montauk

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Friable loamy eolian deposits over dense sandy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 0.6 percent
Depth to restrictive feature: 18 to 30 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Custom Soil Resource Report

Depth to water table: About 24 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.0 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 6s

Hydrologic Soil Group: C

Typical profile

0 to 6 inches: Fine sandy loam

6 to 21 inches: Fine sandy loam

21 to 60 inches: Gravelly loamy sand

Minor Components

Gloucester

Percent of map unit: 10 percent

Paxton

Percent of map unit: 3 percent

Scituate

Percent of map unit: 2 percent

534B—Gloucester fine sandy loam, 3 to 8 percent slopes, stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 0.6 percent

Depth to restrictive feature: More than 80 inches

Custom Soil Resource Report

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 6s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Montauk

Percent of map unit: 10 percent

Charlton

Percent of map unit: 5 percent

Scituate

Percent of map unit: 5 percent

534C—Gloucester fine sandy loam, 8 to 15 percent slopes, stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 80 percent

Minor components: 20 percent

Description of Gloucester

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 0.6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 6s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Montauk

Percent of map unit: 10 percent

Scituate

Percent of map unit: 5 percent

Charlton

Percent of map unit: 5 percent

537B—Paxton fine sandy loam, 3 to 8 percent slopes, stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Paxton and similar soils: 85 percent

Minor components: 15 percent

Description of Paxton

Setting

Landform: Hills

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Custom Soil Resource Report

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over dense loamy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 0.6 percent

Depth to restrictive feature: 20 to 37 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 6s

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam

3 to 26 inches: Fine sandy loam

26 to 60 inches: Fine sandy loam

Minor Components

Charlton

Percent of map unit: 7 percent

Woodbridge

Percent of map unit: 5 percent

Ridgebury

Percent of map unit: 3 percent

Landform: Depressions

537C—Paxton fine sandy loam, 8 to 15 percent slopes, stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Paxton and similar soils: 85 percent

Minor components: 15 percent

Description of Paxton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over dense loamy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 0.6 percent

Depth to restrictive feature: 20 to 37 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Farmland classification: Farmland of statewide importance

Land capability (nonirrigated): 6s

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam

3 to 26 inches: Fine sandy loam

26 to 60 inches: Fine sandy loam

Minor Components

Charlton

Percent of map unit: 8 percent

Woodbridge

Percent of map unit: 5 percent

Ridgebury

Percent of map unit: 2 percent

Landform: Depressions

537D—Paxton fine sandy loam, 15 to 25 percent slopes, stony

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Paxton and similar soils: 85 percent

Minor components: 15 percent

Description of Paxton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over dense loamy lodgment till derived from granite and gneiss

Properties and qualities

Slope: 15 to 25 percent

Surface area covered with cobbles, stones or boulders: 0.6 percent

Depth to restrictive feature: 20 to 37 inches to densic material

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 6s

Hydrologic Soil Group: C

Typical profile

0 to 3 inches: Fine sandy loam

3 to 26 inches: Fine sandy loam

26 to 60 inches: Fine sandy loam

Minor Components

Charlton

Percent of map unit: 10 percent

Woodbridge

Percent of map unit: 5 percent

600—Pits, gravel

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 120 to 200 days

Map Unit Composition

Pits: 100 percent

Description of Pits

Setting

Parent material: Loose sandy and gravelly glaciofluvial deposits

Typical profile

0 to 6 inches: Very gravelly sand

6 to 60 inches: Very gravelly sand

711C—Charlton-Rock outcrop-Hollis complex, sloping

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 120 to 240 days

Map Unit Composition

Charlton and similar soils: 35 percent

Rock outcrop: 25 percent

Hollis and similar soils: 20 percent

Minor components: 20 percent

Description of Charlton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over friable loamy basal till derived from granite and gneiss

Properties and qualities

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 7.5 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: B

Typical profile

0 to 7 inches: Fine sandy loam
7 to 13 inches: Fine sandy loam
13 to 22 inches: Gravelly fine sandy loam
22 to 60 inches: Gravelly sandy loam

Description of Rock Outcrop

Setting

Parent material: Granite and gneiss

Properties and qualities

Slope: 0 to 15 percent
Depth to restrictive feature: 0 inches to lithic bedrock

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8s
Hydrologic Soil Group: D

Description of Hollis

Setting

Landform: Hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Friable loamy basal till over granite and gneiss

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C/D

Typical profile

0 to 5 inches: Fine sandy loam
5 to 19 inches: Fine sandy loam
19 to 23 inches: Bedrock

Minor Components

Ridgebury

Percent of map unit: 10 percent
Landform: Depressions

Chatfield

Percent of map unit: 5 percent

Woodbridge

Percent of map unit: 5 percent

711E—Charlton-Rock outcrop-Hollis complex, steep

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 120 to 240 days

Map Unit Composition

Charlton and similar soils: 35 percent

Rock outcrop: 25 percent

Hollis and similar soils: 20 percent

Minor components: 20 percent

Description of Charlton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over friable loamy basal till derived from granite and gneiss

Properties and qualities

Slope: 25 to 45 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 7.5 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: B

Custom Soil Resource Report

Typical profile

0 to 7 inches: Fine sandy loam
7 to 13 inches: Fine sandy loam
13 to 22 inches: Gravelly fine sandy loam
22 to 60 inches: Gravelly sandy loam

Description of Rock Outcrop

Setting

Parent material: Granite and gneiss

Properties and qualities

Slope: 25 to 45 percent
Depth to restrictive feature: 0 inches to lithic bedrock

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8s
Hydrologic Soil Group: D

Description of Hollis

Setting

Landform: Hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Friable loamy basal till over granite and gneiss

Properties and qualities

Slope: 25 to 45 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 2.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: C/D

Typical profile

0 to 5 inches: Fine sandy loam
5 to 19 inches: Fine sandy loam
19 to 23 inches: Bedrock

Minor Components

Chatfield

Percent of map unit: 15 percent

Woodbridge

Percent of map unit: 5 percent

727A—Enosburg fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Elevation: 90 to 1,000 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Enosburg and similar soils: 80 percent

Minor components: 20 percent

Description of Enosburg

Setting

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loose sandy glaciofluvial deposits over silty glaciolacustrine deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 8.2 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 3w

Hydrologic Soil Group: C

Typical profile

0 to 9 inches: Fine sandy loam

9 to 25 inches: Loamy sand

25 to 60 inches: Stratified loamy sand to silty clay

Minor Components

Maybid

Percent of map unit: 10 percent

Landform: Depressions

Raynham

Percent of map unit: 5 percent

Landform: Depressions

Amostown

Percent of map unit: 5 percent

**743E—Charlton and Gloucester fine sandy loams, 25 to 35 percent slopes ,
very stony**

Map Unit Setting

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 140 to 240 days

Map Unit Composition

Gloucester and similar soils: 40 percent

Charlton and similar soils: 40 percent

Minor components: 20 percent

Description of Charlton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

*Parent material: Friable loamy eolian deposits over friable loamy basal till derived
from granite and gneiss*

Properties and qualities

Slope: 25 to 45 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 7.5 inches)

Interpretive groups

Farmland classification: Not prime farmland

Custom Soil Resource Report

Land capability (nonirrigated): 7s

Hydrologic Soil Group: B

Typical profile

0 to 7 inches: Fine sandy loam

7 to 13 inches: Fine sandy loam

13 to 22 inches: Gravelly fine sandy loam

22 to 60 inches: Gravelly sandy loam

Description of Gloucester

Setting

Landform: — error in exists on —

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Friable sandy eolian deposits over friable sandy basal till derived from granite and gneiss

Properties and qualities

Slope: 25 to 45 percent

Surface area covered with cobbles, stones or boulders: 2.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.1 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Gravelly fine sandy loam

5 to 14 inches: Gravelly sandy loam

14 to 60 inches: Very gravelly loamy sand

Minor Components

Scituate

Percent of map unit: 6 percent

Paxton

Percent of map unit: 6 percent

Montauk

Percent of map unit: 6 percent

Woodbridge

Percent of map unit: 2 percent

745C—Hinckley-Merrimac-Urban land complex, 3 to 15 percent slopes

Map Unit Setting

Elevation: 0 to 1,000 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 120 to 240 days

Map Unit Composition

Hinckley and similar soils: 30 percent
Urban land: 25 percent
Merrimac and similar soils: 25 percent
Minor components: 20 percent

Description of Hinckley

Setting

Landform: Outwash plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loose sandy and gravelly glaciofluvial deposits

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 3s
Hydrologic Soil Group: A

Typical profile

0 to 8 inches: Loamy sand
8 to 13 inches: Loamy sand
13 to 29 inches: Gravelly sand
29 to 60 inches: Error

Description of Merrimac

Setting

Landform: Outwash plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread, riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Friable loamy eolian deposits over loose sandy glaciofluvial deposits derived from granite and gneiss

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 5.4 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 2s

Hydrologic Soil Group: A

Typical profile

0 to 16 inches: Gravelly fine sandy loam

16 to 24 inches: Gravelly sandy loam

24 to 60 inches: Stratified sand to very gravelly sand

Description of Urban Land

Setting

Parent material: Paved/fill

Minor Components

Agawam

Percent of map unit: 4 percent

Ninigret

Percent of map unit: 4 percent

Sudbury

Percent of map unit: 4 percent

Windsor

Percent of map unit: 4 percent

Walpole

Percent of map unit: 4 percent

Landform: Terraces

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